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КАФЕДРА ІНОЗЕМНИХ МОВ
ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР

МАТЕРІАЛИ XI ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ СТУДЕНТІВ АСПІРАНТІВ ТА ВИКЛАДАЧІВ ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ

“TO MAKE THE WORLD SMARTER AND SAFER”

(Суми, 23 березня 2017 року)

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
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LANGUAGE CENTRE

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"TO MAKE THE WORLD SMARTER AND SAFER"

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THE KEPLER MISSION

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Kepler is a space observatory launched by NASA to discover terrestrial planets, especially those in the habitable zone of their stars where liquid water might exist on the surface of the planet. Named after astronomer Johannes Kepler, the spacecraft was launched on March 7, 2009, into an Earth-trailing heliocentric orbit.

The scientific objective of the Kepler Mission is to explore the structure and diversity of planetary systems to:

- determine the percentage of terrestrial and larger planets that are in or near the habitable zone of a wide variety of stars.
- determine the distribution of sizes and shapes of the orbits of these planets.
- determine the properties of those stars that harbor planetary systems etc.

Crash on Kepler spacecraft in May 2013 brought an end to science mission to search for transiting exoplanets. Developed over the months following this failure, the K2 mission continued scientific observations with the Kepler space telescope. K2 became fully operational in May 2014 and is expected to continue operating until 2017 or 2018.

It is anticipated that K2 will:

- determine if hot gas giants exist around young stars, or whether they migrate to small orbits at a later epoch by tidal or other interactions.
- determine the relationship between stellar structure, rotation and activity within stellar associations over a range of ages and metallicity.
- identify the progenitors of Type Ia supernovae from photometric structure in the rise to outburst maximum.
- participate in multi-mission, multi-band monitoring campaigns of ecliptic targets along with other space-based hardware or ground-based telescopes etc.